

## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/IB 00028

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 C12N15/53 C12N9/ C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, CAB Data, SEQUENCE SEARCH, BIOSIS, EPO-Internal, EMBL

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	DATABASE EMBL 'Online! EBI, Hinxton, UK; 27 September 2002 (2002-09-27) A. LUNDEN ET AL.: "Bos taurus flavin-containing monooxygenase 3 (FM03) mRNA, complete cds." retrieved from EMBL Database accession no. AF488422 XP002255183 abstract	1-3,5-9
P,X	-& A. LUNDEN ET AL.: "A nonsense mutation in the FM03 gene underlies fishy off-flavor in Cow's milk" GENOME RESEARCH, vol. 12, no. 12, November 2002 (2002-11), pages 1885-1888, XP002255182 CSH LABORATORY PRESS Article published online before print in November 2002; -/--	1-14

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the International search

22 September 2003

Date of mailing of the International search report

13/10/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5618 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
 Fax: (+31-70) 340-3016

Authorized officer

Hornig, H

C.(Continuation) DOCUMENTS CONSIDERED RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	the whole document ---	
P,X	DATABASE EMBL 'Online! EBI, Hinxton, UK; 27 September 2002 (2002-09-27) A LUNDEN ET AL.: "Bos taurus flavin-containing monooxygenase 3 (FMO3) gene, exon 3 and partial cds" Database accession no. AF488417 XP002255941 abstract	1-3,5-9
P,X	-& A LUNDEN ET AL: "A nonsense mutation in the FMO3 gene underlies fishy off-flavor in Cow's milk" GENOME RESEARCH, vol. 12, no. 12, November 2002 (2002-11), pages 1885-1888, XP002255182 CSH LABORATORY PRESS Article published online before print in November 2002; the whole document	1-14
X	WO 01 23603 A (AKERMAN BEVERLY R ;UNIV MCGILL (CA); TREACY EILEEN P (CA)) 5 April 2001 (2001-04-05) SEQ ID No. 6; claims 1-18 ---	8,11-14
X	BASARAB T ET AL: "SEQUENCE VARIATIONS IN THE FLAVIN-CONTAINING MONO-OXYGENASE 3 GENE (FMO3) IN FISH ODOUR SYNDROME" BRITISH JOURNAL OF DERMATOLOGY, XX, XX, vol. 140, no. 1, January 1999 (1999-01), pages 164-167, XP001053043 ISSN: 0007-0963 cited in the application the whole document ---	11-14
X	TREACY E P ET AL: "MUTATIONS OF THE FLAVIN-CONTAINING MONOOXYGENASE GENE (FMO3) CAUSE TRIMETHYLAMINURIA, A DEFECT IN DETOXICATION" HUMAN MOLECULAR GENETICS, OXFORD UNIVERSITY PRESS, SURREY, GB, vol. 7, no. 5, May 1998 (1998-05), pages 839-845, XP001053063 ISSN: 0964-6906 cited in the application the whole document --- -/--	11-14

C.(Continuation) DOCUMENTS CONSIDERED RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DOLPHIN COLIN T ET AL: "Structural organization of the human flavin-containing monooxygenase 3 gene (FMO3), the favored candidate for fish-odor syndrome, determined directly from genomic DNA."</p> <p>GENOMICS, vol. 46, no. 2, 1 December 1997 (1997-12-01), pages 260-267, XP002204053 ISSN: 0888-7543 cited in the application the whole document</p>	11-14
A	<p>VON GUNTEN R L ET AL: "FACTORS RELATED TO OCCURRENCE OF TRI METHYLAMINE IN MILK" JOURNAL OF MILK AND FOOD TECHNOLOGY, vol. 39, no. 8, 1976, pages 526-529, XP008005212 ISSN: 0146-3802 cited in the application the whole document</p>	
A	<p>R.S. METHA ET AL.: "Trimethylamine responsible for fishy flavor in milk from cows on wheat pasture" JOURNAL OF DAIRY SCIENCE, vol. 57, no. 3, 1974, pages 285-289, XP001073878 CAMBRIDGE UNIVERSITY PRESS, CAMBRIDGE, UK cited in the application the whole document</p>	
A	<p>KIM H S ET AL: "CHEMICAL TEST FOR DETECTING WHEAT PASTURE FLAVOR IN COW MILK" JOURNAL OF DAIRY SCIENCE, vol. 63, no. 3, 1980, pages 368-374, XP001074010 ISSN: 0022-0302 cited in the application the whole document</p>	
A	<p>BURNETT V L ET AL: "CLONING AND SEQUENCING OF FLAVIN-CONTAINING MONOOXYGENASES FMO3 AND FMO4 FROM RABBIT AND CHARACTERIZATION OF FMO3" JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, BALTIMORE, MD, US, vol. 269, no. 19, 13 May 1994 (1994-05-13), pages 14314-14322, XP002043322 ISSN: 0021-9258 the whole document</p>	
	-/--	

## C.(Continuation) DOCUMENTS CONSIDERED RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
------------	--	-----------------------

A	PHILLIPS I R ET AL: "THE MOLECULAR BIOLOGY OF THE FLAVIN-CONTAINING MONOOXYGENASES OF MAN" CHEMICO-BIOLOGICAL INTERACTIONS, ELSEVIER SCIENCE IRLAND, IR, vol. 96, no. 1, 28 April 1995 (1995-04-28), pages 17-32, XP002039327 ISSN: 0009-2797 the whole document ---	
---	---	--

A	EYER H ET AL: "UNTERSUCHUNG DES FEHLAROMAS >IN KAFFEERAHM" SCHWEIZ, MILCHW. FORSCHUNG, BERN, CH, vol. 19, 1990, pages 43-45, XP008005242 cited in the application the whole document -----	
---	---	--

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB 02/00028

Patent document cited in search report	Classification	Publication date	Patent family member(s)	Publication date
WO 0123603	A	05-04-2001	AU WO	7500800 A 0123603 A2
				30-04-2001 05-04-2001